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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,117	11/06/2006	Alenka Vesel	5007653.001US1	2821

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EXAMINER	
NATALINI, JEFF WILLIAM	

ART UNIT	PAPER NUMBER
2831	

NOTIFICATION DATE	DELIVERY MODE
12/04/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/590,117	VESEL ET AL.	
	Examiner	Art Unit	
	JEFF NATALINI	2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 November 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11 and 12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11 and 12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 February 2009* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/18/09 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 11 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In regard to claim 11, the language: (e) storing the measured current and corresponding applied voltage values; (f) determining the maximum current and corresponding applied voltage values from the stored values; and (h) storing the voltage, at which the current is substantially at its maximum value in a database as the

optimal voltage for a given pressure to be used as calibration, was not found in the specification. 'Database' is not seen anywhere in the specification. The specification discloses previously stored values, but does not disclose the claim language seen in the new claims (as the specification is relatively short, the Examiner has reviewed it multiple times as well as text searched for these limitations, if this is incorrect please provide support where each of these limitations may be found in the specification)

In regard to claim 12, the language: (d) an ammeter configured to be capable of storing values of an anode current corresponding to the provided voltage (the specification states the ammeter measures the value, but does not have anything about storing the value); (e) a means for determining the maximum current and corresponding applied voltage values from the stored values; and (g) a means for storing the voltage, at which the current is substantially at its maximum value as the optimal voltage for a given pressure to be used as calibration, was not found in the specification (see above in reference to claim 11 for explanation).

In light of the claim limitations not being described in the specification, these limitations will be examined as best understood.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denny (6701789) in view of Alexander (6870358) and Scheid et al. (4409482).

Denny discloses a device/method for measuring an ultrahigh vacuum (abstract) disclosing:

an ultrahigh-vacuum cold cathode pressure gauge (abstract) comprising a Penning pressure gauge (col 1 lines 13-14), where said ultrahigh-vacuum cold cathode pressure gauge in the ultrahigh-vacuum cold cathode pressure gauge is configured to be capable of being subjected to a magnetic field of between about 0.05 tesla (T) and about 1.5 tesla (T) (abstract, field necessary is applied for pressure measurements, this would provide “capability” to be subject to a field of .05 tesla to 1.5 tesla);

a voltage-source configured to be capable of providing between about 1 kV and 12 kV (col 3 lines 59 – 67), said voltage-source being in electrical communication with an anode of the ultrahigh-vacuum cold cathode pressure gauge (abstract – the high voltage terminal provides power to the anode);

a controller configured to be capable of controlling the voltage-source so that the to voltage-source is capable of providing the anode a voltage between about 1 kV and about 12 kV in a substantially linear with time increasing manner (col 3 lines 59 – col 4 line 5, applying a voltage of anywhere from 2kV to 4kV is broadly time increasing as it's capable of turning on, which means it has increased from 0 to 2kV);

an ammeter is described as measuring the value of current (col 3 lines 59 – 67, also see col 1 lines 23-25).

Denny lacks specifically:

subjecting the pressure gauge to a field of between .05 tesla and 1.5 tesla;

storing the values of anode current corresponding to the provide voltage;

a means for determining the maximum current and corresponding applied voltage values from the stored values;

a means for setting the voltage on the anode to the level, at which the current is substantially at its maximum value; and

a means for storing the voltage, at which the current is substantially at its maximum value as the optimal voltage for a given pressure to be used as calibration.

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Denny to include wherein the magnetic field (described as being for pressure measurements), was applied to the broad range of .05 tesla to 1.5 tesla, as a substantially large field would commonly be used to make accurate pressure measurements.

Scheid et al. discloses wherein in a vacuum system a maximum current is generated at the ion collector and is maintained constant for a given length of time (col 1 line 18-34).

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Denny to incorporate keeping the ion flow at its maximum value during the time period for measuring the vacuum pressure as taught by Scheid et al. in order to maintain a correct path of motion of the ions through the measurement for accurate results (col 1 line 20-22).

Alexander discloses a method for determining a peak value of multiple signals (abstract), wherein the signals can be stored in memory (fig 1 element 107 and col 5 line 66 – col 6 line 6).

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Denny as modified by Scheid et al. to incorporate determining a maximum value of the anode current based on the all the values of current determined and providing storage means as taught by Alexander (determining a maximum from multiple values) in order to be able to accurately find the maximum value that will be able to maintain a correct path of motion of the ions through the measurement for accurate results as described in Scheid (col 1 lines 20-22).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. O'Neal, III (4000457) discloses a cold cathode ionization gauge control for vacuum measurement, wherein potential is varied across the gauge tube to determine the pressure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFF NATALINI whose telephone number is (571)272-2266. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Natalini/
Examiner, Art Unit 2831